

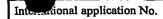
PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

	PATENT COOPERATION TR	CA
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anslation internat	IONAL PRELIMINARY EXAMI	NATION REPORT
•	(PCT Article 36 and Rule 70)	
Applicant's or agent's file reference C1-A0230P	FOR FURTHER ACTION See Noti	fication of Transmittal of Inter y Examination Report (Form PCT/IPP
International application No.	International filing date (day/month/year)	Priority date (day/month/year)
PCT/JP2003/014919	21 November 2003 (21.11.2003)	22 November 2002 (22.11.
International Patent Classification (IPC) or a C12N 15/12, 15/09, C07K 16/3	national classification and IPC 2, 16/18, G01N 33/53	
Applicant	TICAT CONTACTOR	
Cn	UGAI SEIYAKU KABUSHIKI KAI	SHA
1. This international preliminary exam		
and is transmitted to the applicant a	nination report has been prepared by this Inter	national Preliminary Examining Auth
2. This REPORT consists of a total of	sheets, including this cover	sheet.
This report is also accompan	ied by ANNEXES, i.e., sheets of the descript	ion claims and/or drawings which ha
anionaca mia me die pasis 10	ulls report and/or speets containing rectific	ations made before this Authority (s
volto and beenon ouv of the	Administrative instructions under the PCI).	
These annexes consist of a to	otal of sheets.	
3. This report contains indications rela	ting to the following items:	
I Basis of the report	ang to the following items:	
Π Priority		
III Non-establishment o	of opinion with regard to novelty, inventive st	ep and industrial applicability
IV Lack of unity of inve		
V Reasoned statement citations and explana	under Article 35(2) with regard to novelty, in ations supporting such statement	ventive step or industrial applicability
VI Certain documents c		
VII Certain defects in the international application		
VIII Certain observations	on the international application	
Date of submission of the demand	Date of completion of	f this report
21 November 2003 (21.11	01.2003)	April 2004 (01.04.2004)
Name and mailing address of the IPEA/JP	Authorized officer	
	Authorized officer	
acsimile No.	Telephone No.	

Form PCT/IPEA/409 (cover sheet) (July 1998)



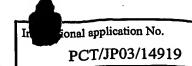


PCT/JP2003/014919

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

pages	L Basis of	f the report	
the description: pages	1. With re	egard to the elements of the international application:*	
the description: pages	⊠ t	the international application as originally filed	
pages			
pages		pages	, as originally filed
the claims: pages	Ī	pages	
the claims: pages	3	pages, filed with the letter of	
pages			
pages			, as originally filed
pages	•	pages , as amended (together with any sta	atement under Article 19
the drawings: pages page	l '	pages	, filed with the demand
the drawings: pages	7	pages, filed with the letter of	
pages			ļ
pages	_	-	, as originally filed
the sequence listing part of the description: pages page			
the sequence listing part of the description: pages pages , filed with the letter of 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language which the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 a or 55.3). 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing: contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing been furnished. The amendments have resulted in the cancellation of:		pages filed with the letter of	-
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2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language	1	pages .	_, 11.00
	the interest These	regard to the language, all the elements marked above were available or furnished to this Authority iternational application was filed, unless otherwise indicated under this item. elements were available or furnished to this Authority in the following language the language of a translation furnished for the purposes of international search (under Rule 23.1(b)), the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination or 55.3). regard to any nucleotide and/or amino acid sequence disclosed in the international application was carried out on the basis of the sequence listing: contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyon international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written statement that the information recorded in computer readable form is identical to the written statement that the information recorded in computer readable form is identical to the written statement that the information recorded in computer readable form is identical to the written statement that the information recorded in computer readable form is identical to the written statement that the information recorded in computer readable form is identical to the written statement that the information recorded in computer readable form is identical to the written statement that the information recorded in computer readable form is identical to the written statement that the information recorded in computer readable form is identical to the written statement that the information recorded in computer readable form is iden	on (under Rule 55.2 and/ ication, the international
the claims, Nos. the drawings, sheets/fig This report has been established as if (some of) the amendments had not been made, since they have been considered to beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** * Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.17). ** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.	5. September 1. Se	the description, pages the claims, Nos the drawings, sheets/fig This report has been established as if (some of) the amendments had not been made, since they he beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** **Tacement sheets which have been furnished to the receiving Office in response to an invitation under his report as "originally filed" and are not annexed to this report since they do not contain 70.17).	Article 14 are referred to amendments (Rule 70.16





V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
Claims	_ 12	YES			
Claims	1-11	NO NO			
Claims		YES			
Claims	1-12	NO			
Claims	1-12	YES			
Claims		NO			
	Claims Claims Claims Claims Claims Claims Claims	Claims 12 Claims 1-11 Claims Claims 1-12 Claims 1-12			

2. Citations and explanations

Document 1: (Akihiro Abe), Report of Researches Sponsored by Sankyo Foundation of Life Science, 1998, Vol. 11, pages 213-219

Document 2: (Varsha Patki, et al.), Ann NY Acad Sci, 1997, Vol. 815, pages 472-474

Document 3: (Howard Ratech), Biochemical and Biophysical Research Communications, 1992, Vol. 182, No. 3, pages 1260-1263

Document 4: JP, 6-141884, A (Yoshihide Hagiwara), 24 May, 1994 (24.05.94)

Document 5: (Shingo Ichinomiya, et al.), Annual Review Immunity 2002, 2001, pages 147-179

Document 6: (Lin Luo, et al.), Nature Medicine, 1999, Vol. 5, No. 1, pages 117-122

Document 7: (Tetsuhiko Tachikawa, et al.), Hematology and Oncology, 2001, Vol. 42, No. 6, pages 565-571

Claims 1-11

The subject matters of claims 1-11 do not appear to be novel in view of document 1.

Document 1 describes that RNA was extracted from leukemia cells of patients with B cell lymphocytic leukemia, the VH region of the idiotype genes was amplified and integrated into plasmid by means of the RT-PCR method (pLV_HRNL), whereby the region was expressed in *Escherichia coli*, and that pLV_HRNL was administered to mice.

Claims 1 and 3-6

The subject matters of claims 1 and 3-6 do not appear to be novel in view of document 2.

Document 2 describes that RNA was extracted from B lymphocytes of patients with rheumatism and a group of DNA fragments of IgV_H genes was obtained.

Claims 1-12

The subject matters of claims 1-12 do not appear to involve an inventive step in view of documents 1-7. Document 3 describes that a group of DNA fragments of IgV_H genes was obtained from B cells.

Document 4 describes the amino acid sequence and base sequence of the variable region of H and L chains of human immunoglobulin IgG specific for a cancer cell antigen produced by human/human fused-cell strains made from B cells of patients with uterine cancer and human lymphoblast cell strains.

It was known from documents 4-7 before the priority date of the present application that specific targeted lesion cells are cut out by means of LCA. Particularly, document 5 describes that cancer tissues or B cells are taken by means of LCA, etc. for gene analysis. Accordingly, a person could have easily conceived of the idea of taking only targeted cancer cells by means of LCA, etc., obtaining genes to code for an antigen that is expressed specifically in cancer cells, and allowing the said antigen to express in host cells, whereby such antigen responding specifically to cancer is obtained.

The effects of the subject matters of claims 1-12 do not appear to be beyond expectation.